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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,653	05/05/2005	Ryoji Abe	37509	1374

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PEARNE & GORDON LLP
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CLEVELAND, OH 44114-3108

EXAMINER

SINGH, RAMNANDAN P

ART UNIT	PAPER NUMBER
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2614

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/533,653

Applicant(s)

ABE, RYOJI

Examiner

Ramnandan Singh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 is/are allowed.
- 6) ☒ Claim(s) 4-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date May 05, 2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figure 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. Applicant admits on page 1, lines 17-18, that Fig. 5 depicts a conventional acoustic feedback suppression apparatus. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy in Japanese has been filed on May 05, 2005.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-4 recites means function language that requires specific treatment under 35 U.S.C. 112, sixth paragraph to explain how the means function language is interpreted. In this case, the specification provides no disclosure of structure so the claims are rejected under 35 U.S.C. 112, second paragraph. See MPEP 2181-III.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Goff [US 20030138117 A1].

Regarding claim 5, Goff teaches an acoustic feedback suppression (20) method [Para: 0005], comprising the steps of:

adding sound signals respectively inputted from a plurality of signal paths to produce a composite signal [Fig. 1; Para: 0022];

judging (i.e. detecting (80)) whether or not acoustic feedback is caused in the added sound signal [Fig. 1; Para: 0024; 0026];

judging whether or not the acoustic feedback is caused in each of the sound signals respectively inputted from the signal paths using selection switch 56 when the acoustic feedback is judged to be caused in the added sound signal (i.e. composite signal) [Fig. 1; Para: 0022; 0024];

calculating filter coefficients (i.e. filter parameters) for each of the sound signals having the acoustic feedback judged to be caused therein [Para: 0025]; and

suppressing the acoustic feedback on the basis of the filter coefficients calculated [Fig. 1; Para: 0025; 0020-0024; 0026].

Allowable Subject Matter

7. Claims 1-4 are would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 1 identifies the uniquely distinct feature of an acoustic feedback suppression apparatus comprising: signal path identifying means for identifying said signal paths having said acoustic feedback caused thereon after converting each of said sound signals into digital data with a first number of data samples; and filter coefficient specifying means for specifying filter coefficients of said filtering means after adding said sound signals

respectively inputted from said signal paths and converting into digital data with a second number of data samples, wherein the second number of data samples is larger than the first number of data samples. As such, claim 1 requires signal path specifying means based on a first number of data samples, and filter coefficient specifying means based on a second number of data samples, wherein the second number of data samples is larger than the first number of data samples. While the closest prior art, Goff [US 20030138117 A1], Seki et al [US 5,677,987], and Nagata et al [US 5,710,823] each teach acoustic feedback suppression apparatus, Goff using a multi-channel feedback identification and control unit, Seki et al using notch filters, and Nagata et al using equalizers; none of them teach or suggest signal path specifying means based on a first number of data samples, and filter coefficient specifying means based on a second number of data samples, wherein the second number of data samples is larger than the first number of data samples. As such, the prior art, either singularly or in combination, fail to anticipate or render the above limitation obvious. Therefore, claim 1 is indicated allowable. Claims 2-4 being dependent from claim 1 are also indicated allowable.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramnandan Singh
Examiner
Art Unit 2614

A handwritten signature in black ink, appearing to read 'R N Singh', with a long horizontal line extending from the bottom right of the signature.